

Remarks

The Applicants note with appreciation the withdrawal of the 35 U.S.C. §112 rejection of Claims 4 and 8 and the 35 U.S.C. §103 rejections based on Fastenau and Aneja.

The Applicants acknowledge the objection to Claim 1 with respect to the spelling of “constant.” The Applicants have amended Claim 1 to correct that spelling.

The Applicants have amended the Specification to correct minor grammatical errors. No new matter has been added.

The Applicants acknowledge the rejection of Claims 1 – 10 under 35 U.S.C. §112. In that regard, the Applicants note with appreciation the Examiner’s helpful comments. The independent claims have been amended in consideration of those helpful comments. The Applicants earnestly believe that the cross-section descriptions in the claims are readily disclosed within the Specification and the Drawings. For example, the Applicants invite the Examiner’s attention to Fig. 1, wherein it shows that the cross-sections have round edges and can also have grooves as recited in the claims. Also, it can be seen that the cross-sections have substantially constant thickness in the flat part or of the circumscribed part around each of the large minor axis. Also, page 15 of the Applicants’ Specification describes that the cross-sections are aligned plural circles in a line. The Applicants accordingly respectfully request withdrawal of the §112 rejection.

The Applicants have also added language to both of independent Claims 1 and 7 that recites that the flattened cross section monofilaments are so aligned that the major axis of the cross section of each monofilament runs in a horizontal direction of the base fabric. Support may be found throughout the Applicants’ Specification such as on pages 10, 11, 19, 20, 21 and elsewhere.

The Applicants have amended Claim 3 into independent form to avoid a misunderstanding that all of the fibers have to be aligned completely. The subject matter of Claim 3 specifies a particular horizontal index, HI, that makes this clear. Claim 2 has been amended to also depend from independent Claim 3.

The Applicants acknowledge the rejection of Claims 1 – 10 under 35 U.S.C. §103 over JP ‘740. As helpfully noted by the Examiner, the Applicants disclose JP ‘740 in the Applicants’ Specification. The discussion of JP ‘740 in the Applicants’ Specification may be found in the middle of page 3. It is noted in that discussion that the air permeation through the base fabric produced according to the disclosure of JP ‘740 is not lower than 0.3 cc/cm²/sec under low pressure (124 Pa) and does not satisfy lower air permeation requirements of the prior art. The Applicants also note the Examiner’s frank acknowledgment that JP ‘740 fails to teach producing a woven fabric with an air permeability under low pressure of less than 0.1 cc/ cm²/sec and an air permeability under high pressure of at most 20 cc/ cm²/sec. The Applicants agree.

The Official Action takes the position that it would have been obvious to one of ordinary skill in the art to optimize the air permeability of the fabric under low pressure and high pressure since it has been held that discovering an optimum value of a result-effective variable involves only routine skill in the art. The Official Action relies on *In re Boesch* to support that proposition. The Applicants have no disagreement with *In re Boesch* in general, but note that *In re Boesch* is inapplicable to the facts of this case.

Boesch involved a single result-effective variable that was known to be a result-effective variable. This was critical in the decision in *In re Boesch* and is not the case here. The Applicants’ solicited claims contain a multiplicity of variables which can have some effect, known or otherwise. However, the important difference here is that the variables at hand, namely the air

permeability under low pressure of less than 0.1 cc/ cm²/sec. is not even recognized in JP '740. This is sharply different from the *Boesch* case, wherein the prior art actually “expressly suggested” lowering the variable at issue. The Applicants respectfully submit that, in this case, the prior art does not even recognize a variable of air permeability under low pressure, much less optimizing such a variable. The Applicants respectfully submit that it is inherently not obvious to optimize a variable that the prior art does not even recognize exists. Thus, one of ordinary skill in the art could reasonably conclude that a number of the claimed physical characteristics of the base fabrics could very likely be quite different.

There is another aspect of the Applicants’ methodology that is not taught or suggested by JP '740. For example, the Applicants caused the monofilaments of the fibers to be aligned such that the major axis of the cross section of each monofilament runs in the horizontal direction of the woven fabric. JP '740 fails to disclose, teach or suggest this. This is brought about by virtue of the Applicants’ methodology wherein they weave the base fabric by applying tension of the warp between 0.2 and 0.6 cN/dtex during the weaving process. This causes the flattened cross-section fibers to be aligned such that the major axis of the cross section of each monofilament runs in the horizontal direction of the woven fabric. Claim 1 specifies the horizontal index, HI. There are no teachings or suggestions in JP '740 to apply the specified tension to the warp yarns during weaving of the base fabric. The Applicants’ Specification makes clear the result that occurs by applying such tension. This may be confirmed by reference to the Applicants’ Examples in their Specification, especially when taken in comparison with Comparative Example 6 of the Applicants’ Specification. In that case, when the tension was outside of the Applicants’ range, the resulting alignment did not occur. Thus, the Applicants have provided additional evidence that the base fabrics of JP '740, made in a certain way, do not necessarily

have the same physical characteristics of the base fabric claimed herein. In fact, the facts on this record indicate that the physical characteristics of the base fabric of this invention are likely to be quite different from those of JP '740. Such physical characteristics can include, among other things, the air permeability under low pressure being within the claimed range.

The Applicants respectfully submit that JP '740 is inapplicable to all of the solicited claims for the reasons set forth in detail above. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



T. Daniel Christenbury
Reg. No. 31,750
Attorney for Applicants

TDC:lh
(215) 656-3381